Example

Determine the measure of each angle described.

a. the complement of a \( \frac{\pi}{5} \) angle

b. the supplement of a \( \frac{3\pi}{5} \) angle

Solution:

a. Since two angles that sum to \( \frac{\pi}{2} \) are said to be complementary, the complement of a \( \frac{\pi}{5} \) angle must be given by

\[
\frac{\pi}{5} \quad \frac{\pi}{2} = \frac{3\pi}{10}.
\]

b. Since two angles that sum to \( \pi \) are said to be supplementary, the supplement of a \( \frac{3\pi}{5} \) angle must be given by

\[
\pi - \frac{3\pi}{5} = \frac{2\pi}{5}.
\]